

What is claimed:

1. A method for protecting a material from termite infestation, comprising treating the material with an effective amount of a compound selected from the group consisting of nootkatone, zizanol, and bicyclovetivenol, wherein the treated material repels or kills termites substantially more than does an otherwise identical material that has not been treated with the compound.

2. A method as in claim 1, wherein the treated material repels termites.

3. A method as in claim 1, wherein the treated material kills termites.

4. A method as in claim 1, wherein the material to be treated is selected from a list comprising soil, substrate, plastics, diatomaceous earth, and any cellulose-containing materials.

5. A method as in claim 1, wherein the compound is nootkatone.

6. A method as in claim 1, wherein the compound is zizanol.

7. A method as in claim 1, wherein the compound is bicyclovetivenol.

8. A method as in claim 1, additionally comprising treating the material with a one or more different compounds selected from the group comprising nootkatone, α -cedrene, zizanol and bicyclovetivenol.

9. A composition for a protective barrier against termite infestation, said barrier composition comprising an effective amount of a compound selected from the group consisting of nootkatone, zizanol and bicyclovetivenol, and a substrate material, wherein such treated barrier repels or kills termites substantially more than does an otherwise identical barrier that has not been treated with the compound.

10. A composition as in Claim 9, wherein the substrate material is a mulch.

1 11. A composition as in Claim 10, wherein the mulch is dried vetiver grass.

1 12. A composition as in Claim 10, wherein the mulch is another cellulose-containing
2 material.

1 **13.** A composition as in Claim 9, wherein the substrate material is soil.

1 14. A composition as in Claim 9, wherein the substrate material is diatomaceous earth.

1 **15.** A composition as in claim 9, wherein the compound is nootkatone.

1 16. A composition as in Claim 15, wherein the concentration of nootkatone in said
2 barrier is between about 10 $\mu\text{g/g}$ and about 1000 $\mu\text{g/g}$.

1 17. A composition as in Claim 15, wherein the concentration of nootkatone in said
2 barrier is between about 10 $\mu\text{g/g}$ and about 200 $\mu\text{g/g}$.

1 18. A composition as in Claim 9, wherein the compound is zizanol.

1 19. A composition as in Claim 9, wherein the compound is bicyclovetivenol.

1 20. A composition as in claim 9, additionally comprising treating the material with a one
2 or more different compounds selected from the group comprising nootkatone, α -cedrene,
3 zizanol and bicyclovetivenol.

21. A composition for a protective barrier against termite infestation, said barrier composition comprising an effective amount of a compound selected from the group consisting of nootkatone, zizanol, and bicyclovetivenol, and a wood building material, wherein the treated building material repels or kills termites substantially more than does an otherwise identical material that has not been treated with the compound.

1 **22.** A composition as in claim 21, wherein the compound is nootkatone.

- 1 23. A composition as in Claim 22, wherein the concentration of nootkatone in said
2 barrier is between about 10 $\mu\text{g/g}$ and about 1000 $\mu\text{g/g}$.
- 1 24. A composition as in Claim 22, wherein the concentration of nootkatone in said
2 barrier is between about 10 $\mu\text{g/g}$ and about 200 $\mu\text{g/g}$.
- 1 25. A composition as in Claim 21, wherein the compound is zizanol.
- 1 26. A composition as in Claim 21, wherein the compound is bicyclovetivenol.
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3 27. A composition as in claim 21, additionally comprising treating the material with a
one or more different compounds selected from the group comprising nootkatone, α -cedrene,
zizanol and bicyclovetivenol.

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